Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 2 of 21

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

1. (Withdrawn) An apparatus for performing a surgical anastomosis, comprising

a tubular body having a distal end and a proximal end and defining a longitudinal axis,

the tubular body including an expandable anchor provided near the distal end thereof and an

expandable cuff provided near the distal end of the tubular body and proximal of the expandable

anchor; and

a joining member configured and adapted to be received about the expandable cuff of the

tubular body, the joining member having an annular body portion including a pair of opposed

terminal edges, wherein the joining member has a retracted position in which the pair of opposed

terminal edges overlap by a predetermined amount and an expanded position in which the pair of

opposed terminal edges overlap by an amount less than the predetermined amount.

2. (Withdrawn) The apparatus according to claim 1, wherein the expandable anchor has a

first position in which the expandable anchor has a radius substantially equal to a radius of the

tubular body and a second position in which the expandable anchor has a radius which is larger

than the radius of the tubular body.

Application Serial No. 10/518,040 Filing Date: December 9, 2004

Docket: 2842 (203-2731 PCT US)

Page 3 of 21

3. (Withdrawn) The apparatus according to claim 2, wherein the expandable cuff has a

first position in which the expandable cuff has a radius substantially equal to a radius of the

tubular body and a second position in which the expandable cuff has a radius which is larger than

the radius of the tubular body.

4. (Withdrawn) The apparatus according to claim 3, wherein the joining member

includes at least one annular array of openings formed through the annular body portion.

5. (Withdrawn) The apparatus according to claim 4, wherein the joining member

includes at least one tab extending from a first of the pair of terminal edges of the annular body

portion, wherein the at least one tab is configured and adapted to be received within an opening

of the at least one linear array of openings.

6. (Withdrawn) The apparatus according to claim 5, wherein each opening is defined by

a pair of opposed side walls transversely oriented with respect to the longitudinal axis, a

longitudinally oriented angled proximal wall and a longitudinally oriented angled distal wall,

wherein the proximal wall is angled such that an upper edge thereof is closer to the at least one

tab than a lower edge thereof and the distal wall is angled such that an upper edge thereof is

closer to the at least one tab than a lower edge thereof.

Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 4 of 21

7. (Withdrawn) The apparatus according to claim 6, wherein each tab extends

tangentially and distally from the first of the pair of terminal edges of the joining member and

terminates in an angled terminal distal edge.

8. (Withdrawn) The apparatus according to claim 7, wherein the joining member

includes a guide rail formed on an inner surface of the annular body portion along either side of

the at least one array of openings, wherein the guide rails slidably receive the at least one tab

therebetween.

9. (Withdrawn) The apparatus according to claim 8, wherein the joining member

includes a distal and a proximal terminal edge.

10. (Withdrawn) The apparatus according to claim 9, wherein the joining member

includes a guide channel formed near a second of the pair of terminal edges of the annular body

portion.

11. (Withdrawn) The apparatus according to claim 10, wherein the guide channel is

defined by a pair of side walls extending radially inward from the distal and proximal terminal

edges of the annular body.

Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 5 of 21

12. (Withdrawn) The apparatus according to claim 11, wherein the guide channel is

further defined by an end wall interconnecting the terminal ends of the pair of side walls.

13. (Withdrawn) The apparatus according to claim 11, wherein the joining member

includes a plurality of flanges extending radially outward from at least one of the distal and

proximal terminal edges thereof.

14. (Withdrawn) The apparatus according to claim 11, wherein the joining member

includes a plurality of projections formed along an outer surface of the annular body portion.

15. (Withdrawn) The apparatus according to claim 11, wherein the expandable cuff of

the tubular body is configured and adapted to press against an inner surface of the annular body

portion of the joining member in order to expand the joining member from the retracted position

to the expanded position.

16. (Withdrawn) The apparatus according to claim 1, wherein the joining member is

fabricated from a bio-absorbable material.

17. (Withdrawn) The apparatus according to claim 1, wherein the joining member is

fabricated from a shape memory alloy.

Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 6 of 21

18. (Withdrawn) The apparatus according to claim 1, wherein the joining member

includes a unidirectional coupling pair including at least one opening formed near a first of the

pair of terminal edges and a plurality of projections formed along the outer surface of the annular

body portion, each of the plurality of projections being configured and adapted to be received

within the at least one opening to allow the joining member to go from the retracted position to

the expanded position.

19. (Withdrawn) The apparatus according to claim 1, further comprising a holder tube

having a distal end and a proximal end, the holder tube being configured and dimensioned to be

received about the tubular body and the joining member when in the retracted position.

20. (Withdrawn) A method for performing a surgical anastomosis, comprising the steps

of:

providing an apparatus for performing an anastomotic procedure, the apparatus

comprising:

a tubular body having a distal end and a proximal end, the tubular body including

an expandable anchor provided near the distal end thereof and an expandable cuff provided near

the distal end of the tubular body and proximal of the expandable anchor; and

a joining member configured and adapted to be received about the expandable

cuff of the tubular body, the joining member having an annular body portion including a pair of

opposed terminal edge, wherein the joining member has a retracted position in which the pair of

Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 7 of 21

opposed terminal edges overlap by a predetermined amount and an expanded position in which

the pair of opposed terminal edges overlap by an amount less than the predetermined amount;

passing the apparatus through a body lumen and through an opening in a body vessel

such that the expandable anchor of the tubular body is positioned within the body vessel;

expanding the expandable anchor of the tubular body such that the expandable anchor of

the tubular body has a radius which is larger than an opening of the body vessel;

withdrawing the tubular body until the body vessel contacts a distal end of the body

lumen;

positioning the joining member over the expandable cuff at a location which extends

between at least a portion of the body vessel and at least a portion of the body lumen; and

expanding the expandable cuff of the tubular body against the inner surface of the joining

member to expand the joining member against at least the portion of the body vessel and at least

the portion of the body lumen to secure the joining member into position.

21. (Withdrawn) The method according to claim 20, further comprising the step of

retracting the expandable anchor and the expandable cuff.

22. (Withdrawn) The method according to claim 21, further comprising the step of

withdrawing the tubular body from the body vessel and the body lumen.

Application Serial No. 10/518,040 Filing Date: December 9, 2004

Docket: 2842 (203-2731 PCT US)

Page 8 of 21

23. (Withdrawn) The method according to claim 20, wherein the surgical anastomosis is

a radical prostatectomy.

24. (Withdrawn) The method according to claim 23, wherein the body vessel is the

bladder and the body lumen is the urethra.

25. (Withdrawn) The method according to claim 24, including the step of removing the

prostrate gland from between the urethra and the bladder to define a urethral stump and a bladder

neck.

26. (Currently Amended) A radially expandable joining member for joining body

vessels, comprising:

an annular body portion defining a longitudinal axis, the annular body portion including a

distal terminal edge, a proximal terminal edge and a first and a second side terminal edge,

wherein each of the first and the second side terminal edges is longitudinally oriented;

a guide channel formed near the first side terminal edge of the annular body;

at least one annular array of openings formed in the annular body;

at least one locking tab extending tangentially from the first side terminal edge, each

locking tab being in registration with a respective array of openings formed in the annular body

and receivable in the openings of the at least one annular array of openings, wherein the joining

member has a first position wherein the annular body has a first diameter and a second position

Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 9 of 21

wherein the annular body has a second diameter which is larger than the first diameter, wherein

the at least one locking tab inhibits the annular body from returning to the first diameter when

the body vessels apply a radially inward oriented constriction force about an outer surface of the

annular body portion, by being received in an opening of the at least one array of openings; and

a pair of guide rails extending radially inward from an inner surface of the annular body

portion, at least one of the pair of guide rails being spaced a longitudinal distance from each of

the proximal and distal terminal edges and extending circumferentially a substantial length of the

at least one annular array of openings such that the at least one locking tab is slidably received

between the pair of guide rails.

27. (Original) The joining member according to claim 26, including two annular arrays

of openings formed in the annular body and two tabs extending tangentially from the first side

edge, wherein the two tabs are configured and dimensioned to be received, one each, within a

respective opening formed in the annular body.

28. (Previously Presented) The joining member according to claim 27, wherein the guide

rails are formed, one each, along each side of the two annular arrays of openings formed in the

annular body.

Claim 29. (Cancelled)

Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 10 of 21

30. (Currently Amended) The joining member according to claim [[29]] 26, wherein the

guide channel is defined by a pair of side walls extending radially inward from the distal end

proximal terminal edges of the annular body.

31. (Original) The joining member according to claim 30, wherein the guide channel is

further defined by an end wall interconnecting the terminal ends of the pair of side walls.

32. (Currently Amended) The joining member according to claim 31, further including a

plurality of flanges extending radially outward directly from at least one of the distal and

proximal terminal edges thereof.

33. (Currently Amended) A radially expandable joining member, comprising:

an annular body portion defining a longitudinal axis, the annular body portion including a

distal terminal edge, a proximal terminal edge and a first and a second side terminal edge,

wherein each of the first and the second side terminal edges is longitudinally oriented;

at least one annular array of openings formed in the annular body;

at least one locking tab extending both tangentially and radially beyond the first side

terminal edge, each locking tab being in registration with a respective array of openings formed

in the annular body and receivable in the openings of the at least one annular array of openings,

wherein the joining member has a first position wherein the annular body has a first diameter and

a second position wherein the annular body has a second diameter which is larger than the first

Application Serial No. 10/518,040

Filing Date: December 9, 2004 Docket: 2842 (203-2731 PCT US)

Page 11 of 21

diameter, wherein the at least one locking tab inhibits the annular body from returning to the first

diameter, once expanded to the second diameter, by being received in an opening of the at least

one array of openings; and

a pair of guide rails extending radially inward from an inner surface of the annular body

portion, at least one of the pair of guide rails being spaced a longitudinal distance from each of

the proximal and distal terminal edges and extending circumferentially a substantial length of the

at least one annular array of openings such that the at least one locking tab is slidably received

between the pair of guide rails.

34. (Previously Presented) The joining member according to claim 33, wherein each of

the openings of the at least one annular array of openings is defined by an angled wall such that

an upper edge of the angled wall is closer to the second side terminal edge than a lower edge of

the angled wall.

Claim 35 (Cancelled).

36. (Previously Presented) The joining member according to claim 33, wherein the

joining member is fabricated from a bio-absorbable material.

37. (Previously Presented) The joining member according to claim 33, wherein the

joining member is fabricated from a shape memory alloy.

Application Serial No. 10/518,040 Filing Date: December 9, 2004

Docket: 2842 (203-2731 PCT US) Page 12 of 21

38. (Previously Presented) The joining member according to claim 33, wherein the joining member includes a plurality of projections formed along an outer surface of the annular body portion.